

## February 26, 2006

**REPLY TO COMMENTS** of Chris Imlay, of Booth, Freret, Imlay & Tepper, P.C., filed on Behalf of: ARRL, the National Association for Amateur Radio.

## 1. BACKGROUND AND INTRODUCTION:

I, Tom Whiteside, have been a licensed Radio Amateur since November 1995 and am currently the Amateur Radio Emergency Service (ARES ®) District Emergency Coordinator for digital communications for the South Texas section. In this capacity and as an operator for one of the emergency communications Winlink 2000 HF participating stations, I have direct involvement with operations under “local or remote control” per Part 97.221 (c). This involvement includes direct experiences in disaster communications in Hurricanes Katrina and Rita as well as recent support for the International Health Service mission to Honduras. I wish

to add the following comments to *support* the Reply made by the ARRL in behalf of its Petition for Rule Making, RM-11306, and to request the deletion of the 500 Hz limit on such operations.

## **2.     *DISCUSSION:***

Much of the Winlink 2000 criticism in comments opposed to the ARRL proposal are coming from those without any direct experience with this system. From my own observations and experience, there is a major distinction between operations that are under "fully automatic control" and those using "local or remote control" (commonly referred to as "semi-automatic"). Stations under local or remote control per Part 97.221 are only initiating connectivity with a *live human being* sitting at the station as a control operator. As with any operation, they hear most of what is on the frequency before they transmit, but like any HF operation, they cannot hear everything. As an avid tester, I see little difference between initiating operations under local or remote control versus initiating operations with a control operator on each end. In both instances, *the main issue is "listening carefully before transmitting,"* a technique not practical with fully-automatic operations. In addition, each Winlink 2000 receiving station scans several frequencies so that the initiating control operator has *options* should any particular frequency be otherwise occupied. If the frequencies for a particular station are occupied, other such stations are scanning frequencies that could then be used.

If the FCC Part 97.1 is still regarded as the "Basis and purpose" for the amateur service, then it is important to provide more opportunities for such stations under local and remote control to operate daily for the safety and well-being of those using the system, for emergency communications and to further develop the radio art. In my experience, this has been exactly the purpose and function of the Winlink 2000 worldwide amateur radio messaging system.

- Example: Hurricane Katrina and Rita communications. As the ARRL COO Harold Kramer recently testified before the US House Subcommittee on Telecommunications and the Internet, amateur radio played an important role in disaster communications for hurricanes Katrina and Rita.<sup>1</sup> My amateur station participated as a Winlink 2000 participating station in the aftermath of both hurricanes. Hours of messages were handled daily that included spreadsheets of food orders for 20,000+ meals a day from food preparation centers and other complex logistics for volunteers and other supplies. Using voice communications for such information transfer would have required far more bandwidth and been subject to errors.

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<sup>1</sup> the ARRL COO Harold Kramer WJ1B comments before the US House Subcommittee on Telecommunications and the Internet.: [www.arrl.org/news/stories/2005/09/30/2/](http://www.arrl.org/news/stories/2005/09/30/2/)

- Example: International Healthcare Service Communications<sup>2</sup>. This month a team of 11 amateurs again provided communications for this medical service which provides healthcare across numerous villages from portable hospitals set up for this purpose across Honduras. Amateur radio's part in this certainly promotes international goodwill per Part 97.1. These communications with my station alone typically had 4 hours of daily HF connect time transferring a 1 megabyte of data. Interestingly, on a day during a busy RTTY contest, there was not a single connect request which is a good example of control operators avoiding causing interference.
  
- Example: Emergency communications planning across South Texas. As stated above, I serve as the Amateur Radio Emergency Service (ARES ®) District Emergency Coordinator for digital communications for the South Texas section. We are creating local VHF Winlink 2000 e-mail over amateur radio systems with equipment installed in many local EOCs and hospitals. In the event of a widespread Internet outage or a communications failure in our less populous areas, the HF Winlink 2000 component of the system is a critical part of this growing system.

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<sup>2</sup> [www.arrl.org/news/features/2002/08/23/1/](http://www.arrl.org/news/features/2002/08/23/1/) and [www.winlink.org/News.htm](http://www.winlink.org/News.htm) , "QST article, "Winlink in the Jungle."

- In addition to my own experience with Winlink 2000, the US Coast Guard, amateurs in the United Nations, the Salvation Army, the Baptist Relief, the National Weather Service, including NOAA and NOAA MAROB<sup>3</sup> and many others worldwide utilize this valuable service for their emergency communications needs.

Despite our successes with Winlink 2000, it is a critically crowded resource. Pactor 3, a high speed data transfer protocol, cannot be used under local or remote control per Part 97.221 outside the very narrow HF sub-band (18.105-18.110 MHz, 14.0950-14.0995 MHz, 14.1005-14.112 MHz, 10.140-10.150 MHz, 7.100-7.105 MHz, or 3.620-3.635 MHz) segments.

You must not only share your 2.2 KHz data transfer signal with other such stations, but on the bands used for emergency communications, such as 40 meters, there is only a total of 5 KHz to share with fully automatic Packet stations, foreign broadcasting stations, and any other station that wishes to use these spaces despite not having this restriction themselves. In other words, at best, you are "trapped" without room for proper operations. It is no surprise given this that the development of more enhanced data transfer protocols is slow. Since by their very nature such operations will fall under local or remote control, with these severe constraints, there is no incentive to develop enhanced digital protocols.

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<sup>3</sup> [www.nws.noaa.gov/om/marine/marob](http://www.nws.noaa.gov/om/marine/marob).

## ***CONCLUSION***

The ARRL response to its Petition for Rule Making, RM-11306 is certainly justifiably welcomed considering the purpose specified in Part 97.1 for the amateur service. With a well-planned *voluntary* band plan, and the continued self-policing, self-regulating responsibilities currently exhibited on the part of those within the domestic amateur service, the plan is badly needed to take amateur radio into the next decade and beyond. Such flexible volunteer planning of mode segregation will allow those who use the various services to determine the extent of their use. The ARRL petition provides for the preservation of existing modes, while also giving an opportunity to further develop the radio art all in a timely manner, especially in the area of digital communications, thereby allowing it to catch up with the rest of the communications world.

Respectfully Submitted,

Tom Whiteside, N5TW